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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/933,144	08/20/2001	Thomas Schaeck	DE9-2000-0037	6599

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EXAMINER

GIANOLA, JOHN F

ART UNIT PAPER NUMBER

2145

DATE MAILED: 05/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

4

Office Action Summary

Application No.

09/933,144

Applicant(s)

SCHAECK, THOMAS

Examiner

John F. Gianola

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 5-11, and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Padmanabhan et. al. "Using Predictive Prefetching to Improve World Wide Web Latency."

3. With respect to Claim 1 and Claim 14, Padmanabhan et. al. disclose:

A communication method between a server and a client computing device in which responsive to client requests the requested contents are delivered from said server via a network to said client computing device, comprising the step of: in response to a current request determining additional non-requested contents being associated with the content of the current request and delivering said additional non-requested contents in predetermined server load traffic conditions, said non-requested contents having a probability to be desired subsequently to the current request which is higher in relation to that of other contents being associated as well with the content of the current request (see Section 1 "Introduction" and Section 3.1, "Architecture of the System with Prefetching," page 26, lines 19-22).

4. As to Claim 2:

Determining the current load of said server, delivering addition contents only the server's current load is below a predetermined threshold level (see Section 3.1 "Architecture of the System with Prefetching," page 26, lines 19-22).

5. With respect to Claim 5, Padmanabhan et. al. disclose the limitations of Claim 1 as noted above, and further disclose:

determining said non-requested contents from an evaluation of statistics tracking the access probability of a plurality of different contents having each an association to the currently requested content (see Section 3 "Predictive Prefetching" and Section 3.2 "Prediction Algorithm").

6. With respect to Claim 6, Padmanabhan et. al. disclose the limitations of Claim 5 as noted above, and further teach creating a weighted graph that tracks access records in order to predict future accesses within a certain time frame. Thus, Padmanabhan et. al. disclose:

The method according to Claim 5 in which said statistics are based on weighted graph calculations, the contents being represented as nodes, the linkages being represented as vertices, and the access probability being tracked as a vertex weight attribute (see Section 3.2 "Prediction Algorithm").

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7. With regards to Claim 7, Padmanabhan et. al. disclose the limitations of Claim 1 as noted above, and further disclose:

Receiving transmission time information associated to particular requests, and evaluating it as feedback information (see Section 4 "Experimental Methodology," as well as Figure 4).

8. With respect to Claim 8, Padmanabhan et. al. disclose the limitations of Claim 1 as noted above, and further discloses:

The method according to Claim 1 used for delivering web pages from an Internet server computer (see Section 1 "Introduction").

9. With regards to Claim 10, Padmanabhan et. al. disclose the limitations of Claim 1 as noted above, as well as:

A server computer system having installed program means implementing means for determining and delivering non-requested contents according to the method of Claim 1 (see Section 3.1 "Architecture of the System with Prefetching").

10. With respect to Claim 11, Padmanabhan et. al. disclose the limitations of Claim 1 as noted above, as well as:

An intermediate server computer system switched between a server computer system according to Claim 1 and client computer system and having installed program means implementing means for receiving and buffering non-requested

contents and for sequentially providing said contents to a client computer system not being able to process additional contents with a respective request (see Section 6 "Discussion").

11. With regards to Claim 14, Padmanabhan et. al. disclose the limitations of Claim 1 as noted above, as well as:

A computer program product stored on a computer usable medium comprising computer readable program means for causing a computer to perform the method of Claim 1, when said computer program product is executed on a computer (see Section 1 "Introduction" and Section 3.1 "Architecture of the System with Prefetching").

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

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1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

14. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Padmanabhan et. al., in view of Jiang et. al..

15. As to Claim 3, as noted above, Padmanabhan et. al. disclose the prioritizing and/or withholding additional, non-requested content, but not basing this decision on the current usage of the computer's processor, or the current request rate. Jiang et. al., however, do teach using system loads and capacities to determine if additional content should be transmitted (see Jiang et. al.: column 6, lines 36-57).

16. Claim 4 is rejected under 25 U.S.C. 103(a) as being unpatentable over Padmanabhan et. al., in view of Jiang et. al. As noted above, Padmanabhan et. al. disclose the prioritizing and/or withholding additional, non-requested content, but not delivering additional content when server load is low. Jiang et. al., on the other hand, specifically note that delivering additional content should increase indirectly with server load (see Jiang et. al.: column 6, lines 52-55).

17. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the method of Padmanabhan et. al. with the invention of Jiang et. al. in order to increase the efficiency of the network content server.

18. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Padmanabhan et. al., in view of Tuah et. al. "Investigation of a Prefetch Model for Low Bandwidth Networks." Padmanabhan et. al. disclose the use of a communication method between a client and server that delivers additional non-requested material to the client along with the requested contents in a process they call "prefetching documents." Padmanabhan et. al. teach using this method to access the World Wide Web (WWW), but do not teach the use of this method to access pages in the Wireless Markup Language. Tuah et. al., however, disclose the use of mobile computer users using prefetching to access data wirelessly. WML is a standard language used to access websites via mobile wireless clients. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Padmanabhan et. al.'s method with Tuah et. al.'s wireless prefetching using Wireless Markup Language in order to allow wireless clients to access web pages written in a standard language.

19. Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over Padmanabhan et. al. Padmanabhan et. al. teaches the limitations of Claim 1 as noted above, as well as a client computer system having installed program means implementing means for receiving and buffering non-requested contents delivered

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according to the method of Claim 1 (see see Section 3.1 "Architecture of the System with Prefetching" and Figure 2). Padmanabhan et. al. however, does not disclose the actual implementation of the system. It would have been obvious of one of ordinary skill in the art to implement the teaching of Padmanabhan et. al.

Response to Arguments

20. Applicant's arguments filed March 3, 2005 have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., that prefetching in the application is not initiated by the client and that the prior teaches a "client pull" while the applicant discloses a "server push" technology) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

21. Applicant additionally argues that in his invention, in contrast to the prior art, "...that delivery by the server is predicated on predetermined server load traffic conditions." As noted above, in Padmanabhan et. al., prefetching in the prior art can be conditional and prioritized, with prefetching taking a lower priority than explicit requests (see page 26, lines 19-22). This obviously discloses "delivery predicated on predetermined server load traffic conditions."

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22. Furthermore, applicant argues that the combination of Padmanabhan et. al. and Jiang et. al. would not be obvious because "...one is a client-driven, client 'pull,' whereas Jiang does not teach that the client make the prefetching determination." The applicant also argues that for this reason, the combination of Padmanabhan et. al. and Tuah et. al. would likewise not result in the claimed invention. This argument, however, is unpersuasive. Padmanabhan et. al. provide a system where a client and server work together to prefetch files (as required of any client-server system to prefetch files) but where the server determines what, if anything, is prefetched (see page 26, lines 19-22).

Conclusion

23. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

24. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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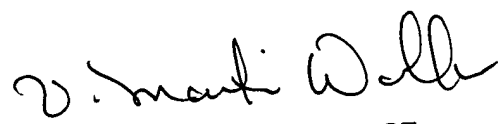
the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John F Gianola whose telephone number is (571)272-3848. The examiner can normally be reached on Mon - Fri (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached at (571)272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jfg


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SUPERVISORY PATENT EXAMINER

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